

CLAIMS

1. A connector including:

a header comprising a header body formed of an insulation material, and plural pairs of header posts held on both side walls of the header body; and

a socket comprising a socket body formed on an insulation material and having a plug groove with which the header is engaged, and plural pairs of socket contacts held on both side walls of the plug groove of the socket body and contacted with the header posts when the header is engaged with the plug groove; characterized by that

the socket body is reinforced by a pair of socket reinforcing metal fittings integrally inserted into both end portions thereof in longitudinal direction;

a pair of the socket reinforcing metal fittings is formed to protrude outward from both side walls of the plug groove in longitudinal direction, and have a pair of fixed portions to be soldered on lands of a circuit board and a coupling portion connecting between the fixed portions and embedded into an end portion of the socket body in the longitudinal direction, respectively.

2. The connector in accordance with claim 1 characterized by that

the header body is reinforced by a pair of header reinforcing metal fittings respectively integrally inserted into both end portions thereof in longitudinal direction, and

the header reinforcing metal fittings each has a sectional shape

in widthwise direction substantially the same as that of the header post.

3. The connector in accordance with claim 1 characterized by that a protrusion and a concavity are serially provided on the second contact portion of the header post along heightwise direction of the header to a second face opposite to the first face.

4. The connector in accordance with claim 3 characterized by that the protrusion is formed at a position a little nearer to the first face from center in the heightwise direction of the header post.

6. The connector in accordance with claim 3 characterized by that the concavity is channel shape elongated along the heightwise direction of the header post.

7. The connector in accordance with claim 6 characterized by that the concavity has two slanted faces depth of which becomes deeper for approaching to the center in the widthwise direction so that the section in the widthwise direction of the header post becomes substantially V-shape.

8. The connector in accordance with claim 3 characterized by that a width dimension of the concavity in the widthwise direction of the header post is formed to be larger than a width dimension of the protrusion and smaller than a width direction of the first contact portion of the socket contact.

9. The connector in accordance with claim 3 characterized by that dimensions and position of the concavity in the heightwise direction of the header post is established in a scope that the first

contact portion of the socket contact slides on the second contact portion.

10. The connector in accordance with claim 2 characterized by that the header reinforcing metal fitting is provided a protrusion and a concavity serially on a portion corresponding to the second contact portion of the header post along heightwise direction of the header reinforcing metal fitting from a side of a face facing the socket toward a side of a face mounted on a circuit board.

11. A manufacturing method of a connector including:

- a header comprising a header body formed of an insulation material, and plural pairs of header posts held on both side walls of the header body; and

- a socket comprising a socket body formed on an insulation material and having a plug groove with which the header is engaged, and plural pairs of socket contacts held on both side walls of the plug groove of the socket body and contacted with the header posts when the header is engaged with the plug groove; characterized by comprising:

- the plural pairs of header posts are

- a process for forming conductive terminals having substantially the same shape as the header post serially at a predetermined pitch along two lines opposing with each other on band shaped metal plates by punching work;

- a process for inserting a number of pairs of the conductive terminals larger by two than a number of pairs of the plural pairs of

the header posts among the two lined conductive terminals formed on the metal plate into a die;

a process for insert molding of insulation resin so that two pairs of the conductive terminals positioned at both sides among the conductive terminals inserted into the die are embedded into the inside in vicinities of both side portions of the header body in longitudinal direction; and

a process for cutting the conductive terminals unified with the header body by insert molding from the metal plate.

12. The manufacturing method of the connector in accordance with claim 11 characterized by further comprising a step that plural pairs of the conductive terminals a number of which is larger than at least four than a number of plural pairs of the header posts are extracted among the two lined conductive terminals formed on the metal plates, and rest conductive terminals except two pairs of conductive terminals disposed at both ends and the same number of pairs of the conductive terminals as the number of pairs the header posts disposed at center portion are removed by cutting off from the metal plates.

13. The manufacturing method of the connector in accordance with claim 11 characterized by that two pairs of the conductive terminals disposed at both ends and serving as the header reinforcing metal fittings are cut to be substantially the same dimensions as a dimension of the header body in widthwise direction when the conductive terminals are cut off from the metal plates.

14. The manufacturing method of the connector in accordance with claim 13 characterized by that concave portions are formed in vicinities of both end portions of the header body 11 in a side of a face to be mounted on a circuit board in the insert molding.